

STUDIES IN THE EUPATORIEAE (ASTERACEAE). XLVI.

A NEW GENUS, STANDLEYANTHUS.

R. M. King and H. Robinson
Smithsonian Institution, Washington, D.C. 20560.

To those familiar with the tribe Eupatorieae the genus Standleyanthus based on Eupatorium triptychum of B. L. Robinson was inevitable. Of this plant, Robinson (1926) said, "This species is remarkable for its trifoliolate leaves with clearly petiolulate leaflets. It exhibits no close relationship to any other species." Dr. Robinson went on to describe the unusual corolla throat which has a very slender tubular portion about 3 mm. long which expands above into a turbinate portion about 1.6 mm. high. There can be no question that the plant is very distinct and easily recognized and it is hoped that additional material will be found by future collectors in Costa Rica.

The relationships of Standleyanthus can be appreciated since additional characters have been recognized. The mamillose inner surfaces of the corolla lobes, the elongate anther collars with numerous inornate quadrate cells and the slightly enlarged base of the style all indicate that the genus is Ageratinoid. The lax habit of the plant and infusion of some Critonioid characters suggests a place near the genus Neomirandea which is also common in Costa Rica.

Although the trifoliolate leaves are very distinctive, the structure of the achene is equally useful for identification. The mature achene has broad whitish ribs which are prominent against the black sides, the setae occur prominently on both ribs and lateral surfaces and the outer layer of cells often peels away at maturity. In these characters the achenes are most like those of Critonia. Toward the base of the achene, the ribs become greatly enlarged covering the entire surface and obscuring any carpopodial development. On a few achenes a very small carpopodium can be seen which has larger quadrate cells with beaded thickenings in the walls as in Ageratina.

Standleyanthus R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae suffrutescentes laxae pauce ramosae. Caules teretes glabri. Folia opposita longe petiolata ternate decomposita, laminis oblonge-ovatis margine remote crenato-undulatis. Inflorescentiae corymboso-paniculatae. Involucri squamae ca 12 inaequilongae oblongae vel late lanceolatae 2-3-seriatae; receptacula leniter convexa glabra. Flores

ca 12 in capitulo; corollae infundibulares extus inferne glabrae, lobis aequilateraliter triangularibus vel longioribus extus superne aliquantum papillois, cellulis interioribus brevibus distincte protuberantibus; filamenta antherarum elongata, cellulis inferne plerumque quadratis, parietibus tenuibus inornatis, cellulis exothecialibus subquadratis, appendicibus antherarum ovatis obtusis; styli inferne parum incrassati glabri, appendicibus tenuibus superne leniter mamillosis; achaenia prismatica 4-5-costata, setifera costis inferne valde incrassatis confluentibus; carpodia indistincta; pappus setiformis uniseriatus, setis ca 20, scabris potius persistentibus tenuibus basi discretis, cellulis apicalibus acutis.

Shrub with terete glabrous stem. Leaves opposite, long-petioled with leaflets petiolulate, blades of leaflets oblong ovate, margins remotely crenate-undulate. Inflorescence a corymbose panicle. Phyllaries ca 12, in 2-3 series, unequal, oblong to broadly lanceolate. Receptacle slightly convex, glabrous. Heads ca 12 flowered, corollas funnelform, outer surface of corolla glabrous below, lobes about as long as wide, papillose on the outer surface, inner surface of corollas with prominent bulging cells. Anther appendages large, anther collars slightly enlarged, composed mostly of quadrate or rectangular cells, walls only slightly thickened, not ornamented. Stylar base scarcely or not enlarged, glabrous, stylar appendage linear, slightly mamilliose. Achenes prismatic, 4-5 ribbed, ribs very enlarged at base, pale, setiferous, carpodia indistinct sometimes a row or two of quadrate cells. Pappus of ca 20 scabrous setae, apical cells acute.

Type species: Eupatorium triptychum B.L.Robinson

Standleyanthus triptychus (B.L.Robinson) R.M.King & H.Robinson, comb. nov. Eupatorium triptychum B.L.Robinson, Contr. Gray Herb. 77: 43. 1926. Costa Rica.

Acknowledgement

This study was supported in part by the National Science Foundation Grant - 20502 to the senior author.

Reference

Robinson, B.L. 1926. Records preliminary to a general treatment of the Eupatorieae, -vi. Contr. Gray Herb. 77: 3-62.